

THE ROSEATE TERN *STERNA DOUGALLII ARIDEENSIS* ON ARIDE ISLAND
SEYCHELLES: NOTES ON THE 1984 SEASON

The Aride population of Roseate Terns was first monitored for the whole of its breeding cycle in 1978 (Warman 1979). Observations have since been made by O. Volcere who came to the island in 1979 as Assistant Manager, but there has been no written report. The following qualitative observations represent only the second record of the breeding cycle.

Colonies

On Aride, Roseate Terns breed in separate sub-colonies around which they are based until shortly before they leave the island, when they congregate on rocks near the sea. These colonies do not overlap with the colonies of any other species. In 1984, nine distinct sub-colonies were distinguished, which were roughly in the same sites as recorded by Warman (1979). However, it appears that the boundaries of the sites have been extended considerably, so that some sites are almost adjacent. Seven of the sub-colonies occupied sites under a canopy of *Pisonia* woodland. Shaded, woodland sites seem to be preferred, and it was these which had increased most in area and were first to be occupied. Only two of the sites were on 'grassland' and account for, at most, one quarter of the total Roseate Tern population. Positions of sub-colonies vary slightly from year to year.

Breeding plumage

One major discrepancy was found between the observations made by Warman and our own. Warman comments that at the time of courtship, all birds have black bills, the first traces of red on the bill only appearing after the eggs had been laid and incubation was proceeding; by the time the chicks were fledged and adults preparing for departure, the bills were completely red. According to observations made in 1984 it appears that the red colouration *only* occurs when the birds are in breeding condition. This is an important distinguishing feature of the sub-species *arideensis*.

On arrival at Aride, the birds had black legs and bills. Both legs and bill had turned completely red by the time egg-laying started. Red legs, feet and bills persisted throughout the incubation period and for a considerable time after hatching. Only when the young are nearly fledged do the bills and legs of adult birds start to turn black. By the time of departure from Aride, bills and legs had reverted to all-black, contrary to the statement made by Warman. In addition, the breast feathers have a pink colouration during breeding, which also disappeared by the time the birds left the island.

Breeding cycle

- 24 April Very large numbers of birds arrived during the night and were heard calling at dawn. Some days previously, groups of birds had started to congregate on rocks.
- 8 May By this time colonies were occupied and the birds were very excitable and easily disturbed by observers.

- 19 May Considerable numbers of eggs had been laid at woodland sites, fewer at grassland sites which were occupied last.
- 13 June First eggs hatched at woodland sites in the west of the island.
- 21 June First eggs hatched at grassland sites.
- 7 July Many chicks starting to fly, but still within the confines of the colony. Parents sometimes took a while to find their chick on return to the colony. Many disputes were observed between adults returning with fish and those remaining in the colony. Birds seemed almost oblivious to the presence of observers, but both adults and young were very argumentative amongst themselves.
- 22 July Nearly all chicks flying but still remaining near nest sites. By the end of July, some birds began to congregate on rocks in preparation for departure.
- 3 August A few birds remained at nest sites, but the colonies were much diminished, more than half the birds having already left.
- 15 August No adult birds seen. Four young birds remained at one site, in poor condition, apparently having been abandoned, and they died shortly after.

Mortality

Variation between sites

Very few dead young were found at sites under the *Pisonia* canopy. The number of dead chicks was much greater at the largest grassland site, where there was no shade. This could partly be due to desertion by parents, as adults leave roughly at the same time, regardless of whether chicks are ready to go. As these chicks were the last to hatch, death as a result of desertion would be expected to be higher. However, Sooty Terns *Sterna fuscata* nesting nearby also suffered higher chick mortality, so it seems more likely that death was due to over-exposure to the sun.

Predation

Human activity now has a minimal effect in that no eggs are collected; disturbance by island staff is kept to a minimum, to allow for the particular sensitivity of Roseate Terns, so that chances of egg-predation by skinks is also reduced. Aride has a small resident population of Barn Owls *Tyto alba*, and whilst no definite information has been obtained as to the number of Roseates taken, this is probably not significant.

Accidental deaths

A small number of adult birds were found hanging between forks of *Pisonia* branches. Some deaths occurred early in the season due to immobility resulting from sticking to *Pisonia* fruits; two birds were found affected in the central part of the island, but none at sites in the west where the canopy is high and birds can fly in and out without danger of entanglement. No chicks were affected in this way.

Ticks

A number of chicks were infested with ticks within a week of hatching and later some deformation of feet was observed. Tick infestation was lower in 1984 than in previous years and only a small proportion of the population was affected.

Conservation and management

It seems certain that the Aride population of Roseate Terns has increased from 1978 to 1984, and as long as the future of the island reserve remains secure, the outlook is favourable. Annual monitoring is extremely important for this species, as numbers and breeding success vary considerably from year to year. The birds are renowned for their sensitivity, and have been known to desert eggs and chicks for no apparent reason. It is vital that disturbance is kept to a minimum.

The most suitable habitat for the species appears to be mature woodland, the shade afforded compensates for deaths caused by *Pisonia* fruit entanglement or hanging. This also will vary from year to year, so further study is needed. Pineapples, which at one time threatened to take over nest sites, are now being shaded out by woodland, so this is no longer a danger to the habitat. The accidental import of rats must at all costs be prevented, and all incoming goods carefully scrutinized. Disturbance by low-flying aircraft is rare.

No quantitative observations have been made, neither have any ringing operations been carried out, and it is doubtful whether the disturbance involved is merited.

REFERENCE

WARMAN, S.R. 1979. The Roseate Tern *Sterna dougallii arideensis* on Aride Island, Seychelles. *Bulletin of the British Ornithologists' Club* 99: 124-128.

Susan M. Tyzack and O. Volcere, Aride Island, via Praslin, Seychelles

Scopus 10: 45-47, June 1986

Received 4 February 1986

NOTES ON THE SPECKLED PIGEON *COLUMBA GUINEA* IN NW SOMALIA

Ash & Miskell (1983) have drawn attention to the recent spread of the Speckled Pigeon *Columba guinea* in Somalia, and the purpose of this note is to record its status in NW Somalia in 1958, and attempt to explain various flock movements which were noted.

Distribution

By 1958 this bird was quite common in the townships as far east as Sheikh and Burao, breeding freely in unused house chimney pots in Hargeisa during April, October and November (i.e. during the rains); Archer & Godman (1937) describe the bird as being "confined to one area, Gebileh - El Birdaleh - Birdah - Buramo (= Borama) on the Somali-Abyssinian border". They also remark that at Gebileh it